

REMARKS

Claims 2-14 are active. Claim 1 is canceled and replaced by new claim 10.

Claims 11-13 are new and correspond to and are rewritten allowable claims 6-8 prior to amendment. Claim 14 corresponds to a further embodiment not previously claimed and a new proposed drawing figure, Fig. 1f, which corresponds to this claim. Claims 1-3 and 9 are rejected under 35 USC 102 as being anticipated by Torahiko '060.

Claims 1-5 & 9 are rejected under 35 USC 103 as being unpatentable over Aratani et al '826. Applicants note with appreciation that Claims 6 - 8 are objected to and are deemed to contain allowable subject matter. No new matter is introduced in the added claim and drawing figure.

Amended claims 2-9 and new claims 10-14 are submitted for reconsideration.

Claim 1, canceled, is rejected as being anticipated by '060 and obvious over '826. New claim 10 is believed to be patentably distinguishable from these references.

New claim 10 calls for:

a substrate;
a first electrode supported on the substrate forming a first capacitor plate, the first electrode defining a first electrode total area value, the first electrode total area value being reduced by a plurality of spaced recesses in the first electrode and forming an electrode first surface area having a value corresponding to the reduced value;
an organic semiconductor layer on the first electrode and in ohmic contact with the first electrode;
an insulation layer on and in ohmic contact with the semiconductor layer; and
a second electrode on and in ohmic contact with the insulation layer and forming a second capacitor plate, the second electrode having a second surface area value larger than the first surface area,

The underlined portion of this claim is missing in the cited references. The first electrode which corresponds for example to the bottom electrode 2', Fig. 1c of applicants' specification, has plurality of spaced recesses such as recesses 8. These recesses reduce the total surface area of the electrode within its outer perimeter total

area, both electrodes implicitly having the same area as defined by its respective outer perimeter as represented by Figs. 1b and 1c.

The top electrode 5 is a solid continuous sheet electrode material while the bottom electrode is not, i.e., it is broken up by recesses 8. The electrode 8, the bottom electrode, defines the effective surface area of the claimed first electrode, and which is reduced in value from the total surface area of the second electrode, the top electrode, both of which electrodes define essentially the same outer perimeter footprint. See applicants' specification page 7 (the amended verified translation), lines 17-21, states:

“there occurs, in the depleted state of semiconductor layer 3', a reduction of the effective plate surface area of the capacitor to the surface area of the structured bottom electrode 2', which is smaller than the plate surface area of the top electrode 5 serving as the second capacitor plate.”

Also see the last paragraph on page 7 of this version of the specification or paragraphs [00042] and [00044] of the substitute specification. The first and second electrodes serve as the capacitor plates with the plate of the first electrode reduced in surface area relative to the second electrode. The claimed second electrode which may correspond to electrode 5 applicants' Fig. 1b, has a surface area larger than the surface area of the first claimed electrode due to the recesses 8 in the first electrode. Neither of the two cited references, Jpn. '060 Torahiko and Aratani '826 disclose this claimed relationship of the relative surface area values of the two electrodes forming the capacitor plates as claimed. There is no disclosure of such relative plate area values in these references as claimed.

The Action states that when the structures of the references is substantially identical to that of the claims, the claimed properties are assumed the same. Since the structures of claim 10 and the references have been shown to differ and are not

identical to that of the reference structures, this conclusion is not valid. For these reasons alone, claim 10 is believed allowable.

With respect to the '826 reference the Action states that this reference fails to teach a capacitor. The Action, however, states that the examiner takes Official Notice that it is well known to those skilled in the art that electrically connecting the source and drain electrodes of an FET will give an FET based capacitor, where the source and drain electrodes act as a first plate and the gate acts as a second plate.

Applicants traverse this conclusion that this subject matter is subject to Official Notice. The Examiner is respectfully requested to provide an affidavit under 37 CFR 1.104d(2) as to his personal knowledge that such an FET acting as a capacitor is known to him. Otherwise such Notice without documentary evidence to support the examiner's conclusion is permissible only certain circumstances. The facts must be capable of instant and unquestionable demonstration as being well known. MPEP 2144.03. Such facts must defy dispute.

"It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known." MPEP 2144.03 A "The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amenable to the taking of such notice."

MPEP 2144.03 C "If the examiner is relying personal knowledge to support the finding of what is known in the art, the examiner must provide an Affidavit . . ."

According to the MPEP the asserted notice of what is well known is not so notoriously well known that it is capable of instant and immediate determination as being well known. Therefore a reference is required and '826 is inappropriate as a

reference alone without such an additional reference that an OFET serves as a capacitor when its drain and source electrodes are connected to a common electrical conductor in combination with the gate electrode. For these reasons, claim 10 is believed allowable.

The remaining claims 2-9 include all of the structure of claim 10 and thus are believed allowable at least for these reasons and for the particular structures claimed therein.

Claim 11 is allowable claim 6 rewritten in independent form. Claims 12 and 13 are allowable claims 7 and 8 also rewritten in independent form. These claims are believed allowable.

Claims 6-8 are retained in the application since these claims now depend from claim 10 which is different than the original claim 1 from which claims 6-8 depended. For these reasons claims 11-13 are different than present claims 6-8. Claims 6-8 continue to contain allowable subject matter as noted by the Action.

Claim 14 contains similar structure as claim 10 except no insulator is in this structure. Support for this claim appears in applicants' specification at paragraph [0006] of the substitute specification where it is stated that the capacitor may be an OFET with only a semiconductor responsive as an insulator and thus a capacitor at MHZ and GHZ frequencies. This claim is believed allowable for reasons similar to those given for claim 10. The relative size of the first and second electrodes as claimed is not shown in any of the cited references with or without an insulator.

The new proposed Fig. 1f illustrates such a device and the specification is amended to include its description. No new matter is introduced.

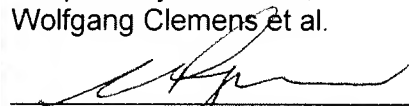
Since claims 2-14 have been shown to be in proper form for allowance such action is respectfully requested.

There is no unity of invention problem with any of the added claims as there is a common technical feature in all of these claims under PCT Rule 13 not shown in the prior art.

No fee is believed due for this paper as there are no extra claim fees involved and this paper is timely submitted on Nov. 24, 2008 since the due date of 11/22/2008 falls on a Saturday. The Commissioner is authorized to charge any fee that might be due for this paper or credit any overpayment to deposit account 03 0678. The RCE fee is requested to be charged to deposit account 03 0678.

November 24, 2008

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